

Status of All Claims

1. (original) An oil-based drilling fluid for use in sealing sand formations comprising:
  - a) a polymer latex capable of providing a deformable latex film on at least a portion of a subterranean formation, the latex comprising polymer particles in an aqueous continuous phase;
  - b) a hydrocarbon base fluid; and
  - c) an emulsifier.
2. (original) The oil-based drilling fluid of claim 1 where the polymer particles in the latex average between about 0.8 to less than 10 microns in size.
3. (original) The oil-based drilling fluid of claim 1 where the latex particles are in a size distribution where the majority of the particles range from more than 10 to less than 100 microns.
4. (original) The oil-based drilling fluid of claim 1 where the polymer latex is capable of providing a deformable latex seal on at least a portion of a subterranean sand formation and the polymer particles are selected from the group consisting of polymethyl methacrylate, polyethylene, carboxylated styrene/butadiene copolymer, polyvinylacetate copolymer, polyvinyl acetate/vinyl chloride/ethylene copolymer, polyvinyl acetate/ethylene copolymer, natural latex, polyisoprene, polydimethylsiloxane, and mixtures thereof.
5. (original) The oil-based drilling fluid of claim 1 where the polymer latex is present in the drilling fluid in an amount of from about 0.1 to about 10 volume% based on the total oil-based drilling fluid.

6. (original) The oil-based drilling fluid of claim 5 where the polymer particles in the latex comprises particles that average about 1 microns to less than 100 microns in size.

7. (currently amended) An oil-based drilling fluid for use in sealing subterranean sand formations comprising:

- a) from about 1 to about 10 volume% of a polymer latex having particles selected from the group consisting of polymethyl methacrylate, polyethylene, carboxylated styrene/butadiene copolymer, polyvinylacetate copolymer, polyvinyl acetate/vinyl chloride/ethylene copolymer, polyvinyl acetate/ethylene copolymer, natural latex, polyisoprene, polydimethylsiloxane, and mixtures thereof in an aqueous continuous phase, where the polymer latex is capable of providing a deformable latex film on at least a portion of a subterranean formation;
- b) a hydrocarbon base fluid; and
- f) an emulsifier in an amount effective to keep the latex suspended in the oil-based drilling fluid.

8. (original) A method of inhibiting fluid loss of an oil-based drilling fluid in a sand formation, the method comprising:

- a) providing an oil-based drilling fluid comprising:
  - i) a polymer latex capable of providing a deformable latex film on at least a portion of a subterranean formation, the latex comprising polymer particles in an aqueous continuous phase;
  - ii) a hydrocarbon base fluid; and
  - iii) an emulsifier; and
- b) circulating the oil-based drilling fluid in contact with a borehole wall.

9. (original) The method of claim 8 where in providing the oil-based drilling fluid the polymer particles are in a size distribution where the majority of the particles range from about 1 to less than 100 microns.

10. (currently amended) The method of claim 8 where in providing the oil-based drilling fluid the polymer particles in the latex are average from about 1 to 10 microns in size.

11. (original) The method of claim 8 where in providing the oil-based drilling fluid, the polymer latex is capable of providing a deformable latex seal on at least a portion of a subterranean sand formation and the polymer particles are selected from the group consisting of polymethyl methacrylate, polyethylene, carboxylated styrene/butadiene copolymer, polyvinylacetate copolymer, polyvinyl acetate/vinyl chloride/ethylene copolymer, polyvinyl acetate/ethylene copolymer, natural latex, polyisoprene, polydimethylsiloxane, and mixtures thereof.

12. (original) The method of claim 8 where in providing the oil-based drilling fluid, the polymer latex is present in the drilling fluid in an amount of from about 0.1 to about 10 vol.% based on the total oil-based drilling fluid.

13. (canceled)

14. (original) A method of inhibiting fluid loss of an oil-based drilling fluid in a sand formation, the method comprising:

- a) providing an oil-based drilling fluid comprising:
  - i) from about 0.1 to about 10 vol.% of a polymer latex comprising polymer particles in an aqueous continuous phase where the polymer particles are selected from the group consisting of polymethyl methacrylate, polyethylene, carboxylated styrene/butadiene copolymer, polyvinylacetate copolymer, polyvinyl acetate/vinyl chloride/ethylene

copolymer, polyvinyl acetate/ethylene copolymer, natural latex, polyisoprene, polydimethylsiloxane, and mixtures thereof;

- ii) a hydrocarbon base fluid; and
- iii) an emulsifier; and

where the proportion is based on the total oil-based drilling fluid; and

- b) circulating the oil-based drilling fluid in contact with a borehole wall.